WHAT IS CLAIMED IS:

1.   A tracing method, comprising:

executing a program that includes a plurality of instructions, said plurality of instructions including one or more user trace data commands, wherein a user trace data command instructs a processor to write user trace data to a user trace data register,

detecting a write to at least part of said user trace data register; and

in response to said detected write, generating a trace record that includes at least part of the user trace data in said user trace data register.

2.   The method of claim 1, further comprising outputting said trace record to a trace capture component.

3.   The method of claim 2, further comprising outputting a trace record indication, said trace record indication identifying said outputted trace record as containing user trace data.

4.   The method of claim 1, wherein said user trace data register includes a general processor register value.

5.   The method of claim 1, wherein said user trace data register includes a program variable value.

6. The method of claim 1, wherein said user trace data register includes debug-related information that is observable during program execution.

7. The method of claim 1, wherein said user trace data command is included in said program prior to execution.

8. A tracing system, comprising:

a user trace data register that stores user trace data upon execution of a user trace data command included among a plurality of instructions; and

trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register.

9. The tracing system of claim 8, wherein said trace generation logic outputs said trace record to a trace capture component.

10. The tracing system of claim 9, wherein said trace generation logic further outputs a trace record indication to said trace capture component, said trace record indication identifying said output trace record as containing user trace data.

11. The tracing system of claim 8, wherein said user trace data register includes a general processor register value.

12. The tracing system of claim 8, wherein said user trace data register includes a program variable value.

13. The tracing system of claim 8, wherein said user trace data register includes debug-related information that is observable during program execution.

14. The tracing system of claim 8, wherein said user trace data command is included in said program prior to execution.

15. A computer program product comprising:

computer-readable program code for causing a computer to describe a user trace data register that stores user trace data upon execution of a user trace data command included among a plurality of instructions; and

computer-readable program code for causing a computer to describe a trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register; and

a computer-usable medium configured to store the computer-readable program codes.

16. A method for enabling a computer to generate a tracing system, comprising:

transmitting computer-readable program code to a computer, said computer-readable program code including:

computer-readable program code for causing a computer to describe a user trace data register that stores user trace data upon execution of a user trace data command included among a plurality of instructions; and

computer-readable program code for causing a computer to describe a trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register.

17.   The method of claim 15, wherein computer-readable program code is transmitted to said computer over the Internet.

18.   A computer data signal embodied in a transmission medium comprising:

computer-readable program code for causing a computer to describe a user trace data register that stores user trace data upon execution of a user trace data command included among a plurality of instructions; and

computer-readable program code for causing a computer to describe a trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register.